COMBINED DECLARATION AND POWER OF ATTORNEY FOR (Includes PCT) UTILITY PATENT APPLICATION

Attorney Docket No. APV31642

As a below named inventor, I hereby declare that:

My residence, post office address and ditizenship are as stated below next to my name; that

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CASTINGS OF METALLIC ALLOYS WITH IMPROVED SURFACE QUALITY, STRUCTURAL INTEGRITY AND MECHANICAL PROPERTIES FABRICATED IN REFRACTORY METALS AND REFRACTORY METAL CARBIDES COATED GRAPHITE MOLDS UNDER VACUUM

| the | speci | ification | ٥£ | which | (check | one; |
|-----|-------|-----------|----|-------|--------|------|
| 73 | 73 3- | attacked | ho | ent-n | | |

| [] amende | | | <u> </u> | | | Application : (if applica | | No. | | | a | nd | was |
|--------------|-------------------|------------------|-------------|-------------------------|------------|----------------------------------|-------|-----|-------|-----|-------|----|-----|
| [] v.s. | was fi Nationa | led as 1 Stag | PCT e on | International as U.S. I | Ar Pato | oplication No. ant Applicatio | n No. | on | , and | was | filed | in | the |

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I do not know and do not believe the claimed invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

I hereby claim foreign priority benefits under Title 35, United States Code \$119 and/or \$365(a)(b) of any foreign application(s) and United States provisional applications for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application(s) on which priority is claimed:

| Prior | Foreign | and U | J.S. | Provisional | Application(s) | Priori | ty Claimed | |
|--------|---------|-----------------------------|-------|-------------|----------------|--------|------------|-----------|
| (Numbe | er) | - - (| (Coun | try) | Day/Month/Year | Filed | [] Yes | [] No |
| (Numbe | er) | _ - | (Coun | ıtry) | Day/Month/Year | Filed | [] Yes | No |

Attorney Docket No. APV31642

I hereby claim the benefit under Title 35, United States Code, \$120 and/or \$365(c) of any United States application(s) or PCT international application(s) designating the United States of Am rica listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, \$112:

| Application Serial No. | Filing Date | Status | (patented, | pending, abandoned) |
|--|---|---|---|---|
| Application Serial No. | Filing Date | Status | (patented, | pending, abandoned) |
| I hereby appoint the forapplication and to transtherewith; Stevens, Da 31,674; James E. Ledbet Peter N. Lalos, Reg. No 0100 and faxes to 202-4 | sact all busines vis, Miller & Mo ter, Reg. No. 28 o. 19,789. Direct | s in the Patent sher, L.L.P.; And 1,732; and Thomas | and Trademanthony P. Ve P. Pavelko | ark Office connected enturino, Reg. No. |
| Address all corresponde | | | | |
| I hereby declare that a all statements made on these statements were mulike so made are punish Title 18 of the United jeopardize the validity | information and ade with the kno able by fine or States Code and | belief are beliewledge that will imprisonment, or that such willfur | eved to be to ful false so both, unde il false sta | rue, and further that tatements and the ar Section 1001 of tements may |
| Full Name of Sole, Fir Ranjan RAY | est Inventor I | inventor's Signat | 2 | Date 7/21/03 |
| Residence: Phoenix, Arizona 85022 | | | | Citizenship US |
| Post Office Address: 1256 East Voltaire Avenue Phoenix, Arizona 85022 | | | | |
| Full Name of Second, J Donald W. SCOTT | oint Inventor | nventor's Signal | rure) | Date / /07 |
| Residence: Peoria, Arizona 85381 | | | | Citizenship US |
| Post Office Address: 8772 West Maui Lane | | | | |
| Peoria, Arizona 85381 | | | | |